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SUMMARY OF MEETINGS HELD BY THE JOINT ALTERNATIVE FUELS INFRASTRUCTURE AND VEHICLES STUDY COMMITTEE

COMMITTEE MEMBERS

Senator Jeff Mullis – Co-Chair
District 53

Representative Bubber Epps – Co-Chair
District 144

Senator Frank Ginn
District 47

Representative Mandi Ballinger
District 23

Senator Rick Jeffares
District 17

Representative Valerie Clark
District 101

Senator Emanuel Jones
District 10

Representative Dominic LaRiccia
District 169

Senator Butch Miller
District 49

Representative Brian Strickland
District 111

INTRODUCTION

Alternative fuels are becoming an increasingly attractive alternative to traditional gasoline and diesel fuel. However, alternative fuels are effective only if refueling infrastructure is readily available to meet consumer needs. Due to the fact that the alternative fuel consumer market is not yet established, alternative fuel station operators are seemingly unwilling to initially invest in infrastructure stations and equipment. Thus, there is a potential need to provide incentives for investors and operators to install the necessary infrastructure for the efficient refueling of alternative fuel vehicles to bring the consumer market to fruition in Georgia.

Georgia's tax credit program that incented the purchase of electric vehicles (EV) made the state one of the fastest growing markets for EV sales in the nation. Although the EV credit program has ceased, the increasing presence of EVs on Georgia's roads has resulted in a growing demand for access to charging stations, particularly at workplaces. Commercial and commercial residential property owners consistently receive requests from tenants to install charging stations in their parking facilities. The cost to install a charging station is rarely justified to a building owner, particularly when additional power must be run to the parking area. Currently, a state incentive found at O.C.G.A. § 48-7-40.16(d) provides an income tax credit of 10 percent – up to \$2,500 per electric vehicle charger – to a business enterprise. Because of a subsequent change to the definition of "business enterprise" at O.C.G.A. § 48-7-40.2 regarding Georgia's Jobs Tax Credit program, this income tax credit is now limited to "any business or the headquarters of any such business which is engaged in manufacturing, warehousing and distribution, processing, telecommunications, broadcasting, tourism, research and development industries, biomedical manufacturing and services for the elderly and persons with disability . . . Such term shall not include retail businesses." Given this definition of "business enterprise," the Georgia Department of Revenue has determined the electric vehicle income tax credit is no longer available to commercial property owners.

For the purposes of studying how providing market incentives for the installation of refueling infrastructure for alternative fuel vehicles would serve as a catalyst for the realization of cheap and clean fueling options for the public, as well as how increased market incentives for the purchase or lease of alternative fuel vehicles may drive development of infrastructure, the Joint Alternative Fuels Infrastructure and Vehicles Study Committee (Committee) was created under Senate Resolution 1038 during the 2016 Legislative Session of the Georgia General Assembly.

The Committee was comprised of 10 members, consisting of five members of the Senate and five members of the House of Representatives. The Senators serving on the Committee included: Senator Jeff Mullis, serving as Co-Chair; Senator Frank Ginn; Senator Rick Jeffares; Senator Emanuel Jones; and Senator Butch Miller. The Representatives serving on the Committee included: Representative Bubber Epps, serving as Co-Chair; Representative Mandi Ballinger; Representative Valerie Clark; Representative Dominic LaRiccia; and Representative Brian Strickland.

In carrying out its duties, the Committee held three public meetings at locations throughout the state. Committee meetings were held as follows:

- September 12, 2016 at Mercer University in Macon, Georgia;
- October 24, 2016 in Ringgold, Georgia; and
- November 9, 2016 at the State Capitol in Atlanta, Georgia.

MEETING TESTIMONY

This section provides a brief summary of each meeting, including the names and affiliations of individuals who were asked to provide testimony to the Committee.

Meeting 1

The Committee's first meeting was held on September 12, 2016 in Macon, Georgia. Testimony was provided by:

- Commissioner Lynne Riley of the Georgia Department of Revenue.
- Colonel Jeff Mullen, Colonel Jervis Baker, and Colonel Wolf of the Robins Air Force Base.
- Mr. Richard Jones, General Manager and CEO of the Macon-Bibb County Transit Authority.
- Mr. Bill Moore, Alternative Fuel Sales Manager of Conger LP Gas.
- Mr. Ray Clark of the Middle Georgia Clean Air Coalition.
- Mr. Phil Horlock, President and CEO of Blue Bird.

Commissioner Lynne Riley of the Georgia Department of Revenue testified at the first meeting where she shared with the Committee various statistics on alternative fuel vehicles in Georgia. Specifically, Commissioner Riley shared the alternative fuel registration counts for the years of 2013 to 2015. In 2013, Fulton County had a total of 104,259 alternative fuel vehicles registered; DeKalb County had a total of 37,641 alternative fuel vehicles registered. In 2014, Fulton County had 133,625 alternative fuel vehicles registered; DeKalb County had 45,608 registered. In 2015, Fulton County had 152,514 alternative fuel vehicles registered, while DeKalb County had 55,190. Commissioner Riley also shared the number of electric vehicle titles that were issued from June 2015 to July 2016. July of 2015 had a total of 1,426 electric vehicle titles issued in Georgia. The amount of electric vehicle titles being issued significantly dropped, however, after the expiration of the alternative fuel income tax credit on June 20, 2015; in August of 2015, only 242 electric vehicle titles were issued.

Colonel Jarvis Baker of the United States Air Force shared the alternative fuel initiatives occurring at Robins Air Force Base in Warner Robbins, Georgia. One of their main priorities through their initiatives, Colonel Baker explained, is to limit the dependency on fossil fuels which will decrease any security vulnerabilities.

Mr. Richard Jones is the General Manager and CEO of the Macon-Bibb County Transit Authority, which operates 28 buses on 12 different routes in Macon-Bibb County. Mr. Jones explained how the prior critical condition of the diesel bus fleet ultimately led to the new look and direction for the Macon-Bibb County Transit Authority.

Mr. Bill Moore, Alternative Fuels Sales Manager for Conger LP Gas, one of the largest independent propane companies in South Georgia, testified to the benefits of using propane as an alternative fuel for vehicles. Mr. Moore explained that propane is the most widely used alternative fuel in the world, as well as the third most popular fuel behind gasoline and diesel, with over 300,000 propane vehicles in the United States. Propane is also economical, Mr. Moore explained, as it offers the least expensive upfront costs of any alternative fuel.

Mr. Phil Horlock, President and CEO of Blue Bird, the leading independent designer and manufacturer of school buses, also testified to the benefits of using propane as an alternative fuel for vehicles.

Mr. Ray Clark of the Middle Georgia Clean Air Coalition explained how alternative fuels play a major role in Georgia's Clean Air Initiative.

Meeting 2

The Committee's second meeting was held on October 24, 2016 in Ringgold, Georgia. Testimony was provided by the following individuals:

- Mr. Miles Teems of Teems Electric Company.
- Mr. Phillip Pugliese, representing the Chattanooga Area Regional Transportation Authority (CARTA).
- Mr. Ian Skelton, Director of Natural Gas Vehicles for Atlanta Gas Light.
- Mr. David Jaskolski, Manager of Fuels for Pivotal LNG.
- Mr. Randy Johnson, Director of Electric Transportation for Southern Company.
- Ms. Diane Harris, Electric Transportation Project Manager for Georgia Power Company.
- Mr. Kevin Miller, Director of Public Policy for ChargePoint.
- Mr. Scott Tolleson of the Municipal Gas Authority of Georgia.

Mr. Miles Teems of Teems Electric owns a CNG station in Ringgold, Georgia. Mr. Teems explained how using CNG for fuel is cleaner, better for the environment, and does not require foreign oil. Mr. Teems also shared the costs of a CNG station, which ranges from \$700,000 to over \$1 million.

Mr. Philip Pugliese, representing the Chattanooga Area Regional Transportation Authority (CARTA) – the public transit system in Chattanooga, Tennessee – shared how Chattanooga has succeeded in improving the city's transportation network, making it a more connected and ecofriendly city. Mr. Pugliese explained that CARTA has been utilizing electric buses for mass transit since 1992; 24 years later, CARTA has one of the largest fleets of electric buses in the United States, with 14 all-electric buses running 19 bus routes. Mr. Pugliese also testified to Chattanooga's other alternative fuel initiatives, such as the city's all-electric car sharing program administered by GreenCommuter. GreenCommuter, partnering with the Tennessee Valley Authority, launched the electric car-sharing program in Chattanooga which will deploy 20 all-electric battery electric vehicles, as well as install 20 Level 2 electric vehicle charging stations. The program will also install a 50 kilowatt solar array at CARTA's main facility, as well as a 10 kilowatt site at the Chattanooga Airport and a 20 kilowatt site at the Southern Adventist University. GreenCommuter is also working with Tesla on an all-electric vanpool program for Chattanooga. CARTA is also adding more electric buses to their fleet, with a cost of approximately \$700,000 per bus. Charging stations cost around \$400,000, but can be used for multiple buses.

Mr. Ian Skelton, Director of Natural Gas Vehicles for Atlanta Gas Light, shared how and why many companies are transitioning to using natural gas vehicles in their fleets. Atlanta Gas Light began building and maintaining CNG stations for fleet customers in Georgia and for its Chattanooga Gas affiliate since the early 1990s. In 1996, Atlanta Gas Light partnered with MARTA to develop a CNG transit bus program. Atlanta Gas Light maintains two CNG stations for MARTA's 460 CNG buses. The program saves millions of dollars on diesel fuel costs, reduces emissions, and displaces about 150,000 barrels of oil each year. The City of Atlanta and DeKalb County have also started transitioning their fleet of trucks and vehicles to CNG and have built CNG stations. Both are purchasing other CNG vehicles for resiliency of critical services in the event of fuel supply disruptions or other emergencies. Other companies using natural gas vehicles include: AT&T, Frito Lay, Coca-Cola, FedEx, and Penske. Mr. Skelton also shared an update on Georgia's CNG infrastructure; in addition to the 30 private CNG stations in Georgia owned by MARTA, the City of Atlanta, UPS, etc., there are now 25 public access CNG stations. Lastly, natural gas is only about 1/4 of the total cost of CNG versus 2/3 of the total price at the pump for diesel or gasoline. Mr. Skelton explained that these pricing characteristics make CNG prices more stable, and means more of our fuel dollars stay here in Georgia.

Mr. David Jaskolski, Manager of Fuels for Pivotal LNG, a wholly-owned subsidiary of Southern Company that provides LNG to companies and industries. Mr. Jaskolski testified to the benefits of using LNG, as it is very safe and non-flammable. It is non-toxic, non-corrosive, and eco-friendly, as there is little to no emissions. There is no residue after an LNG spill in water; it merely floats and vaporizes. LNG is also safe to handle with minimal protective equipment. The cost of an LNG fueling station ranges from \$1.5 to \$3 million, while the average LNG truck is approximately \$50,000.

Mr. Randy Johnson, Director of Electric Transportation for Southern Company, shared information on the plug-in electric vehicle market. There was a record sale of 16,974 plug-in electric vehicles in September of 2016 in the United States, with sales up 37.9 percent over 2015 year-to-date. Also, 43 new or revised plug-in electric vehicles are announced to hit the market between 2016 and 2020. Mr. Johnson also discussed current utility charging infrastructure and market support activities occurring across the country. In Utah, there is legislation allowing utilities to spend up to \$2 million annually on electric vehicle infrastructure. In Oregon, there is legislation mandating utilities to create transportation enhancement programs, rate basing infrastructure and offering rebates.

Ms. Diane Harris, Electric Transportation Project Manager for Georgia Power Company, testified to the economic benefits of driving an electric vehicle. Not only are electric vehicles clean, efficient and promote energy independence, but driving electric vehicles also save consumers money through maintenance and fuel savings. Ms. Harris explained that incentives, attractive lease programs, HOV/HOT lane access, workplace charging access, and technology improvements are driving electric vehicle adoption in Georgia. Ms. Harris explained how Georgia Power is trying to meet the needs of its customers by offering incentives to business and residential customers for installing Level 2 electric vehicle chargers. Georgia Power also offers incentives to builders for installing electric vehicle chargers in new homes being built. In addition, Georgia Power currently has 36 community charging islands around the state for public use.

Mr. Kevin Miller, Director of Public Policy for ChargePoint, also testified at the second meeting. ChargePoint is the world's largest network of electric vehicle charging stations. Mr. Miller explained the different levels of charging technology available, each having different charge times. Level 1 chargers take approximately 18 hours to charge an electric vehicle, while Level 2 chargers take approximately

four to eight hours to charge an electric vehicle. DC Fast Chargers take less than 30 minutes to charge an electric vehicle. Mr. Miller explained that fast charging corridors lower barriers for drivers to enter the electric vehicle market by boosting electric vehicle range. Mr. Miller also shared electric vehicle charging infrastructure policy options, such as electric vehicle-ready building codes, streamlined permitting, tax credits, and rebates. Making parking in new construction electric vehicle-ready reduces costs, increases access to electric vehicle charging, and future proofs new projects. Overall, incentivizing electric vehicle charging stations can accelerate the adoption of electric vehicles and increase access to charging.

Mr. Scott Tolleson testified on behalf of the Municipal Gas Authority of Georgia, the largest non-profit, joint-action natural gas agency in the country. Its mission is to provide municipalities a reliable, economical supply of natural gas and to assist them in developing and growing their gas systems to optimize the benefits of public ownership. Membership includes 66 municipally-owned and operated natural gas systems in Georgia, serving over 250,000 retail customers. In his presentation, Mr. Tolleson shared information on the five public CNG public stations that its members serve – two are owned and operated by member cities and three are owned by private companies. Mr. Tolleson explained how the Municipal Gas Authority of Georgia has set aside \$5 million in working capital reserves to finance CNG infrastructure. The program is designed as a low-interest loan program for its members. To date, \$3.1 million has been loaned to two member cities to build public CNG stations: the City of Covington and the City of Douglas.

Meeting 3

The Committee's third and final meeting was held on November 2, 2016 at the State Capitol in Atlanta, Georgia. Testimony was provided by the following individuals:

- Commissioner Lynne Riley of the Georgia Department of Revenue.
- Mr. Rahim Charania, CEO of American Fueling Systems.
- Mr. Mark Gallman of the Building Owners and Managers Association of Georgia (BOMA).
- Mr. Frank Morris of UPS.
- Mr. Tim Slattery, Senior Manager of Government Affairs for Nissan North America.
- Mr. Don Francis, Director of Clean Cities – Georgia.
- Ms. Stephanie Stuckey Benfield, Director of the Mayor's Office of Sustainability.
- Mr. Mike Hudson, Utilities Director for the City of Douglas.
- Mr. John Collins, Regional Manager of Groome Transportation.
- Mr. Mark Dmochowski of Georgia Gas Distributors.
- Mr. Todd Williams of Curbside Recycling.

Commissioner Lynne Riley testified at the last meeting, recapping the insightful information on the current status of alternative fuel vehicle registration in Georgia that was shared during the first meeting.

Mr. Rahim Charania, CEO of American Fueling Systems, which provides alternative fuel such as CNG, LNG, and biodiesel fuels to the transportation and energy sectors through delivery and operation of alternative fueling stations, also provided information at the last meeting. Mr. Charania explained that American Fueling Systems is "fuel neutral" – that is, they develop the infrastructure and facilities for various and all alternative fuels. Mr. Charania explained how passionate American Fueling Systems is about alternative fuels, as alternative fuels make economic, environmental, and national security sense.

Mr. Mark Gallman, on behalf of the Building Owners and Managers Association of Georgia (BOMA), also testified at the last meeting. Mr. Gallman is the maintenance manager of Highwoods Properties, Inc., a commercial real estate company with properties in Atlanta. As the maintenance manager, Mr. Gallman faced challenges when the amount of alternative fuel vehicles increased in Georgia; he needed a place for the tenants of his properties to charge or fill their alternative fuel vehicles. Mr. Gallman explained how expensive it is to provide the infrastructure for alternative fuel vehicles, and BOMA cannot currently take advantage of the tax incentives under the language in House Bills 200 (2015) and 170 (2015). BOMA wants to encourage the legislature to change the language in the law so that BOMA can take advantage of the tax incentives. Specifically, BOMA wishes to change the term “business enterprise” to include commercial and retail properties.

Mr. Frank Morris of UPS presented on UPS’s involvement in alternative fuel vehicles and infrastructure. Currently, the UPS alternative fuel fleet includes LNG, CNG, and propane, displacing over 60 million gallons of gasoline and diesel annually. By the end of 2016, there will be 15 LNG stations, 31 CNG stations, 2,500 class 8 natural gas tractors, 1,700 medium duty CNG delivery trucks, 66 propane stations, and 1,182 medium duty propane delivery trucks. Mr. Morris explained that UPS is dedicated to using alternative fuels, including renewable natural gas (RNG). UPS plans to purchase 60 million gallons of RNG and renewable diesel, and reduce the carbon intensity of its operations by 20 percent by the 2020. While UPS will continue to evaluate all alternative fuel and vehicle technologies, clarity and commitment of federal and state regulations are needed for more wide-scale adoption during time of low oil prices.

Mr. Tim Slattery, Senior Manager of Government Affairs for Nissan North America, shared how Nissan is committed to electric vehicles. Nissan is the bestselling electric vehicle in the U.S. market, while selling a quarter million vehicles worldwide. The Nissan MY16 LEAF became the world’s first affordable electric car to get more than 100 miles of range on a single charge; equipped with a 30-kilowatt battery, the MY16 LEAF gets EPA rated best in class range of 107 miles. Mr. Slattery also explained Georgia’s current status of electric vehicle sales. While Georgia is second in the country for all-time sales of electric vehicles, sales have fallen in Georgia since July 2015. However, Georgia still remains thirteenth in the state for total sales of electric vehicles in 2016. Twelve states have purchase incentives for electric vehicles, ranging from \$1,500 to \$5,000 for purchase or lease. States like Georgia and Tennessee offer HOV access for electric vehicles, and Georgia has an Electric Vehicle Supply Equipment (EVSE) incentive for all eligible business enterprises that purchase or lease electric vehicle supply equipment.

Mr. Don Francis, Director of Clean Cities – Georgia, also presented at the final meeting. The Clean Cities Program is an initiative of the United States Department of Energy, focusing on strategies to reduce petroleum consumption in transportation. There are approximately 100 Clean Cities Coalitions across the country, and Clean Cities – Georgia is the first coalition, serving as the central coordinating point for alternative fuel vehicle activities in Georgia. The goal of Clean Cities – Georgia is to advance the energy, economic, and environmental security of the United States by supporting local decisions to reduce petroleum use in transportation. Mr. Francis shared that a state benefits economically from plug-in electric vehicles because electricity is cheaper. Plug-in electric vehicle owners spend less on fuel costs and can therefore spend more on other local or state-produced goods and services. Mr. Francis presented research conducted by Keybridge Research LLC on the impact of the elimination of the electric vehicle tax credit on Georgia’s economy. The study found that elimination of the Georgia electric vehicle tax credit would reduce state GDP each year between 2015 and 2030, with a total loss of \$107 million. The study also found that without the tax credit, Georgia car owners would pay an additional \$155 million in gasoline bills over the next five years, and \$208 million in such bills over the next 15 years. Cities – Georgia urges the legislature to restore the electric vehicle tax credit in Georgia,

reduce the annual alternative fuel vehicle fee to \$50, and fix the definition of businesses that qualify for Georgia's EVSE tax credit.

Ms. Stephanie Stuckey Benfield of the Mayor's Office of Sustainability also presented at the final meeting. Ms. Stuckey Benfield explained how her office is dedicated to making Atlanta sustainable and an environmental leader. Through her office's initiatives and dedication, the City of Atlanta obtained 60 electric vehicles and five neighborhood electric vehicles, made commitments to the White House to transition 20 percent of Atlanta's city fleet to electric vehicles, saved an estimated \$1,000 per year per vehicle with the 60 electric vehicles obtained, and saved an estimated 21,700 gallons of gasoline with the 60 electric vehicles. In addition, 100 electric vehicle charging stations are to be installed at Hartsfield-Jackson International Airport by the end of 2016, including a DC Fast Charger. There are also plans to add another 300 electric vehicle charging stations by the end of 2017.

Mr. Charlie Davis, Assistant City Manager for the City of Douglas, and Mr. Mike Hudson, Utilities Director for the City of Douglas, shared their views on alternative fuel infrastructure from the perspective of a smaller, rural city in Georgia. Mr. Davis explained that the state can help encourage alternative fuel infrastructure by branding and campaigning the need for alternative fuels and energy independence. Also, the state could help by transitioning their fleet to alternative fuel vehicles, helping to build the necessary alternative fuel infrastructure, and incentivizing alternative fuel infrastructure. Mr. Hudson explained how the City of Douglas partnered with Waste Industries to open its CNG fueling facility. Currently, the City of Douglas has a contract with Waste Industries to use the station and is open for public access.

Mr. John Collins is Regional Manager of Groome Transportation, a leading provider of transportation services throughout the United States, including the metro-Atlanta area. Mr. Collins explained how Groome Transportation uses vehicles converted to use propane fuel.

Mr. Mark Dmochowski of Georgia Gas Distributors explained the importance of alternative fuels. Propane is currently the best alternative fuel according to Mr. Dmochowski. Mr. Dmochowski stated that Hall County is currently running 80 buses on propane fuel, and are saving money as a result. Mr. Dmochowski emphasized that diesel fuel is not the best economic choice today.

Mr. Todd Williams, President of Curbside Recycling, was the final presentation at the last meeting. Curbside Recycling is a company that recycles waste cooking oil by converting it into biodiesel. One gallon of cooking oil roughly converts into one gallon of biodiesel. This biodiesel helps reduce our dependence on petroleum.